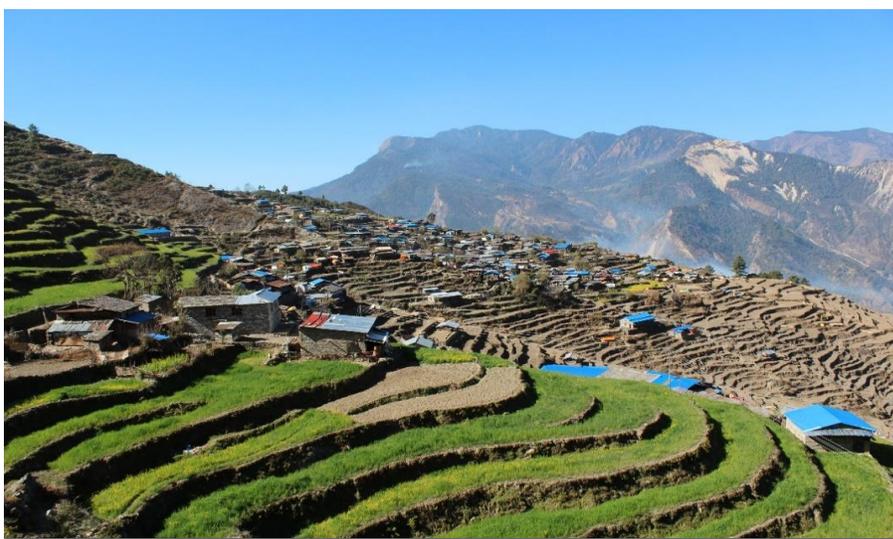


# THE MOUNTAIN INSTITUTE

## PRAGATISHIL PAHAD PROJECT



OCTOBER 2016



## INTRODUCTION

The Mountain Institute had been implementing a program on the sustainable cultivation of Medicinal and Aromatic Plants (MAPs) since 2009 in Rasuwa, Dhading, Gorkha and Sankhuwasabha districts with the support from numerous individuals and foundations.

After the devastating 2015 earthquakes, TMI was committed to continue supporting the communities where we have been working through the years, post-earthquake as well. TMI focused on providing strategic relief support, followed by a post-earthquake rapid needs assessment, on the basis of which, some Quick Relief Activities were implemented in the

earthquake affected working areas.

Focusing on advancing the long-term resilience of these hard-hit communities, as well as rehabilitating their livelihoods and ecosystems on which they depend, TMI designed the “Pragatishil Pahad Project” (PPP) for a period of two years. The Project’s goal was *to support 2,000 households in the most remote mountain communities of Rasuwa, Dhading, Gorkha and Sankhuwasabha districts to rebuild their lives and livelihoods in a manner that improves their resilience to future shocks*. This new project was built on the ongoing programs.

PPP is an integration of the MAPs program in central and eastern Nepal with additional support for rebuilding.

The project is being implemented in partnership with three local NGOs: (i) Rural Tourism and Environmental Education Society in Rasuwa; (ii) Health, Education, Empowerment and Development in Dhading and Gorkha; and (iii) Upper Arun Valley Development and Conservation Society in Sankhuwasabha. The project is also coordinating with the District Disaster Relief Committees (DDRC) and other relevant government line agencies.

## PPP OUTCOMES

- Enhancing the capacity of mountain communities to diversify their livelihood options in an equitable and sustainable way
- Enhancing the capacity of mountain communities to manage fallow and/or degraded land and protect biodiversity in community forests
- Enhancing the capacity of local organizations to support rehabilitation and re-building of earthquake affected areas
- Enabling earthquake affected communities to resume their socio-cultural practices through the restoration of the cultural heritage



## MAPs Cultivation Training

The project successfully conducted 35 units of Basic MAPs cultivation training for 1,019 participants (45% women) and 24 units of Advanced MAPs training for 677 participants (41% women) with both theoretical and practical sessions. Each participant received 200 grams of Chiraito (*Swertia chirayita*) seeds during the training to help start their own cultivation.

Chiraito was the focus species in the Basic Training, with other potential species, such as Satuwa (*Paris polyphylla*), Loth salla (*Taxus wallichiana*), Nirmasi (*Delphinium denudatum*), Large Cardamom (*Amomum subulatum*) and Argeli (*Daphne bholua*) included in the Advanced Training.

The participants committed to undertake MAPs cultivation on a total of approximately 200 hectares of fallow or degraded private and/or community land.



## Plant Nurseries

A multi-purpose nursery with 9 beds for Chiraito, Bikhuma (*Aconitum* spp.), Atis (*Aconitum heterophyllum*), Kutki (*Picrorhiza kurroa*), Pakhanbed (*Bergenia ciliata*) and other fodder and tree species such as Gurans (*Rhododendron* spp.), Utis (*Alnus nepalensis*) and Thingre salla (*Tsuga dumosa*) has been established in Gatlang VDC of Rasuwa. Farmers now have access to a variety of MAPs, fodder, and tree species for commercial and domestic purposes.

Chiraito nurseries were established during all the MAPs cultivation training events, and 11 nurseries for Bikhuma, Jatamasi (*Valeriana jatamansi*), Pakhanbed (*Bergenia purpurascens*), and Padamchal (*Rheum australe*) were also established in Sankhuwasabha. The community will manage these nurseries so that they have access to these saplings in the near future in order to expand their MAPs cultivation.

## MAPs Value addition

Compressor machines were provided to two MAPs Cooperatives in Dhading and Rasuwa. The members were trained in its use and operation. The machines add value to MAPs products because they compress the harvested MAPs in bundles, decreasing their volume and reducing storage and transportation costs.



## Securing MAPs “Product Origin Certificate



With MAPs Product Origin Certificates, MAPs farmers are officially certified that their products are cultivated on private land and not harvested from the wild. This helps MAPs farmers get a concession on taxes on the sale and transport of non-timber forest products. TMI initiated the provision of MAPs Origin Certificates for our farmers, and our local NGO partners have been continuously facilitating the intricate and time-consuming registration process. During this period, 16 MAPs farmers (four women) in Dhading have been issued “Product Origin Certificates” and MAPs Farmers’ Identity Cards. A total of 77 of farmers in the four districts have received such certificates so far.

### Exposure visit

Thirteen participants (five women) from the project districts visited Ilam district in Eastern Nepal, where TMI initiated the MAPs program in 2001. There in the field, they saw the commercial farming of different MAPs species, MAPs Cooperative’s techniques for grading, quality control, storage, marketing, transportation and sales of cultivated MAPs. This visit has created high motivation among them to make changes on their own farms.



Forty-one MAPs farmers (36% women) were trained on **MAPs legal provisions, sustainable harvesting techniques, market management and networking**. They were oriented on Nepal’s new Forest Act and Policy, release permits for commercial cultivation of MAPs, and collection permits for sustainable wild harvest.

### Cooperative management and business development training

In order to enhance and strengthen institutional capacity of the two MAPs co-operatives - Shree Himali MAPs Production Co-operative Limited in Dhading and Himal Herbal MAPs Co-operative Limited in Rasuwa - a cooperative management and business development plan training were organized.

### Rebuilding community-based eco-tourism

Homestay/lodge management training for the owners of 17 existing and potential teashops and homestay/lodge owners (10 women) along the Ruby Valley Trek (Dhading) and the Tamang Heritage Trail (Rasuwa) supported local tourism entrepreneurs affected by the earthquake in revitalizing their businesses. The training focused on homestay/lodge management, cooking, hospitality, and zero waste management to enhance the quality of services along the trails.





The earthquakes caused numerous landslides and earth fissures that have affected both communities and the environment. Several communities in the project area – 3 villages in Haku VDC in Rasuwa, and 14 villages in Dhading and 3 villages in Gorkha - are completely uninhabitable and have been permanently displaced.

In vulnerable areas, the project planted native and fast growing species, with the aim of rehabilitating the vulnerable land. In the village of Sano Haku in Rasuwa, 16 members of community forest user groups, plus local Youth and Mothers' Groups have planted 3,000 saplings of native species such as Utis (*Alnus nepalensis*), Gobre salla (*Pinus wallichiana*), to reforest degraded areas.



Photo: Grassland (above) and Forest (below) in the project areas (Dhading)



## Cardamom Cultivation



Cardamom, a high-value cash crop, referred to as the “Queen of Spices,” has become a major cash crop for farmers in the lower mountains and mid hills, particularly in eastern Nepal, in the last two decades. Based on favorable climatic conditions, local demand, and high market value, the project is promoting cardamom farming in Rasuwa, Dhading and Gorkha districts through distribution of 42,800 cardamom saplings to Women's and Mother's Groups in those areas. The cardamom saplings have been successfully transplanted in the project areas.



## Plant diversity monitoring

Three refresher courses on plant diversity monitoring for NGO staff, MAPs farmers, and Local Resource Persons from community forest user groups were conducted. These trainees will support TMI's efforts to measure the extent to which the introduction of MAPs cultivation on private/degraded land has reduced the unsustainable practice of collecting these valuable plants from the wild. The data gathered this year will form a new baseline, and the continued annual monitoring will provide evidence of MAPs rebounding in the wild areas.



As identified by TMI's post-earthquake rapid needs assessment, two villages – Sano Haku in Rasuwa and Bramdang in Dhading – were identified as high priorities for rehabilitating damaged water sources. The water source that was serving 32 households of three communities in Bramdang had completely dried up and the water source serving 100 households in Sano Haku had been swept away by the huge landslides. Women and children had to walk two to three hours along the risky trails to access drinking water, and some displaced households had not been able to return to their homes due to the scarcity of drinking water. In both villages, the project facilitated the formation of Drinking Water User Committees that were responsible for planning, implementing, monitoring and coordinating the construction of drinking water systems. Two such systems have been built in coordination with the Department of Water Supply and Sewerage with storage tanks and water taps now in use in the villages. Bramdang has three water taps, and there are six in Sano Haku. A community based maintenance fund has also been established, which the User Committee will manage.

The project also provided support to help establish a Repair and Maintenance Trust Fund for the Nimma Chhippa Chyamtang Drinking Water Supply and Sanitation Committee of Chepuwa VDC, Sankhuwasabha district. This system benefits 150 households with water for domestic use, better sanitation, and irrigation of cultivated MAPs and other crops.

The MAPs co-operatives established by TMI in 2012 were renting buildings in Rasuwa and Dhading but those were destroyed during the 2015 earthquakes. The PPP has helped these co-operatives build earthquake-resistant multipurpose buildings that will house their offices, storage for MAPs and other cultivated crops, and will have a multi-purpose room for community events. The buildings will benefit farmers from 15 working VDCs in Rasuwa and Dhading. Building Construction Committees were formed in both districts, followed by site identification and land acquisition. The buildings were designed in line with government codes, and approval has been given by the DDRRC. Both the buildings are under construction.

All village school buildings and toilets in our project areas were completely destroyed in the earthquakes. In Gatlang VDC, the School Management Committee of the Secondary School of Gre village requested our support to build a permanent toilet for the school. With funding from TMI and labor contribution of the community, a permanent structure with three earthquake-resistant toilets was completed for the 200 girls, boys, and teachers of the school. This new structure features an improved water supply and sanitation system with approval from the Rasuwa District Education Office.

The project also supported the rehabilitation of two blacksmith workshops that had been completely destroyed in Khading village, in Lapa in Dhading. These workshops were the livelihood source for 29 households of *Dalits* blacksmith families and the families will be using the two workshops collectively.



Multi-purpose co-operative building under construction



Newly constructed school toilets

### Documentation of destruction of culturally valuable sites and infrastructure

High mountain areas are home to indigenous ethnic groups whose rich cultural heritages—beliefs, customs, and traditions—are hundreds of years old. With support from local partners, TMI is attempting to document the post-earthquake status of both tangible and non-tangible cultural assets and heritages in these areas. TMI has been continuously seeking funding to restore destroyed cultural assets in the project areas.



## MONSOON UPDATES

Geographical complexities, fragile terrains, inaccessibility, marginality, poverty and limited services and economic opportunities characterize mountain areas in Nepal. Mountain people are therefore most vulnerable. As a result, remoteness, logistical difficulties have always led to the disproportionate distribution of relief and recovery efforts as well. Moreover, with the onset of the 2015 monsoon, the frequency and intensity of landslides and flash floods along the ruptured and weakened slopes have permanently displaced a number of communities. Additionally, the prolonged monsoon of 2016 has further deteriorated the condition with additional displacement of the mountain communities. Ri and Darkha VDCs in Dhading and, Kashigaun VDC in Gorkha, Haku VDC in Rasuwa were among the red alert areas identified by the government and communities have had to be relocated elsewhere. Recent updates inform that a total five northernmost VDCs of Dhading - Darkha, Ri, Tipling, Jharlang and Lapa - have been disconnected with the district headquarters due to larger, fresh landslides at Mauwa cliff in mid-September. The DDRC in Dhading decided to relocate as many as 400 households of seven settlements of Ri and Lapa VDCs to other safe locations after concluding that they were at great risk, following the 2015 earthquakes and the monsoon. The Budhigandaki River, which borders Dhading and Gorkha districts, was temporarily blocked and 20 temporary huts were buried in Khanebesi in Gorkha. Furthermore, foot trails and sub-roads that lead to the remote and northernmost areas have been damaged by mud and landslides. This has aggravated the roads situation, causing numerous accidents. These are just a few examples of the extreme challenges of reaching our project areas and the difficult working conditions we all face during the monsoon.



## PERSISTENCE PAID

In Tipling village, high in the mountains of Dhading district, 27-year-old **Prakash Ghale** and his 29-year-old brother **Sonam** attended the MAPs cultivation training supported by TMI in 2011. All participants in the training received 200 grams of Chiraito (*Swertia chirayita*) seeds as an incentive to enable them to start cultivating MAPs. In 2012, the farmers received training on MAPs legal provisions, sustainable harvesting, and market management techniques. This was soon followed by an opportunity to participate in a site visit to Ilam, in the eastern part of Nepal. This is the area where TMI first successfully piloted the MAPs Program and where it has been most successful.



Photo (above) Prakash and Photo (below) Sonam in their MAPs field



The site visit re-energized the brothers as they saw first-hand the successful farmers in Ilam. The Ghale brothers grew MAPs on approximately 1 hectare of land, investing US\$ 1,410 of their own savings for seeds, labor and land preparation. The brothers have seen steady progress. Even after the 2015 progress, they were able to earn US \$1,700 through sales of 15 kilograms of Chiraito seeds and 225 kilograms of dried Chiraito plants. This money enabled them to buy timber and metal sheeting to build a roof for their temporary shelter since the earthquake destroyed their house. The income from MAPs helps the Ghale family buy household supplies and pays for their children's' education. They dream of making their village part of a "MAPs Pocket Area" which will improve livelihoods and protect the biodiversity of the area.

## MORE CHALLENGES FOR WOMEN

**Mrs. Lhakpa Chomu Tamang**, aged 36 from Tetangche village in Chilime VDC of Rasuwa, has been cultivating MAPs since 2012. Seeing the farmers in her village cultivating MAPs inspired her. She decided to invest US\$176 to buy seeds and began growing MAPs on over half a hectare of land. She believes that MAPs take longer to mature and harvest but they are easier to cultivate than other crops.

Mrs. Tamang earned around US\$500 from her first harvest. These earnings have allowed her to provide a better education for her children and are helping her recover from the devastating impact of the 2015 earthquakes. An area for improvement is to bolster her income by enabling her to join the MAPs Cooperative based in neighboring Gatlang VDC. The Cooperative could



provide help with storing her products, offer access to information about the best MAPs market price, assist with visiting markets and better negotiating with different traders. These are the kind of activities that Mrs. Tamang is currently not able to do for herself because she can't leave her home and children for extended periods.

## MAPS FARMING: ALTERNATIVE FOR OLDER FARMERS



**Pasang Tamang**, of Thuman VDC in Rasuwa, used to harvest medicinal and aromatic plants in the wild as a young man. Today, at age 71, he energetically tends the MAPs fields he started after he received training in 2009. He went on a site visit to Ilam, which turned out to be a big motivator for him. Pasang and his wife have been cultivating a number of species on 1.5 hectares of private and leased land and have been earning an average of US\$400 annually. In the context of Nepal's GDP of US\$ 670, this additional income is extremely helpful. As older farmers, they find MAPs cultivation a relatively easier occupation in their advanced years since it is not so labour intensive. MAPs do not require as much water, ploughing and weeding as other food crops. Also, Tamang doesn't have to carry the harvested products to market

because the MAPs Cooperative collects them and sells them to traders at a much better price than he would have been able to negotiate on his own.

## THE FARMER TURNED ENTREPRENEUR

The village of Kimathanka, near the Tibet border in Sankhuwasabha district, is an arduous four-day walk from the nearest road head. Forty-nine year old **Mrs. Phinsum Sherpa**, is one of the lead MAPs farmers in the village. She produced 79 kilograms of Chiraito plants and generated US\$ 800 in 2015. With this income, she has purchased a flour-grinding machine, which allows her to run a grinding mill for millet, corn, barley, wheat and buckwheat flour. With the earnings from MAPs and her new enterprise, she has been able to send her son to Kathmandu for Buddhism Studies and one of her daughters to the district headquarters for higher education.

In 2015, some of her Chiraito plants were stolen, and a landslide induced by road construction also swept away her Chiraito farm.

Yet she has not lost her motivation; she is very enthusiastic about expanding her MAPs cultivation from Chiraito to other species, such as Satuwa and Majitho.



The Pragatishil Pahad Project has received generous support from **Fondation Pro Victimis, blue moon fund, LaGuntza Foundation, Nepalese Doctors Association in the UK, Peradam Foundation, Dudley Foundation, Walkinshaw Family Foundation, Harman Family Foundation, and many individual donors.**

We are very grateful for your support!

[www.mountain.org](http://www.mountain.org)



### CONTACT ADDRESS

THE MOUNTAIN INSTITUTE  
P.O. Box 2785  
Baluwatar, Kathmandu  
Tel: 977-1-4419356  
Fax: 977-1-4410073  
Email: [aroregional@mountain.org](mailto:aroregional@mountain.org)

THE MOUNTAIN INSTITUTE  
3000 Connecticut Ave, NW, Suite 101  
Washington, D.C. 20008 USA  
Tel: (202) 234-4050  
Fax: (202) 322-9492  
Website: [www.mountain.org](http://www.mountain.org)